

DESCRIPTION OF A NEW SPECIES OF
TRUE BARRIMUNDI, *OSTEOGLOSSUM*
JARDINII. FROM NORTHERN QUEENS-
LAND.

By W. SAVILLE-KENT, F.L.S., F.Z.S.

COMMISSIONER OF FISHERIES, QUEENSLAND.

[Read before the Royal Society of Queensland, December 11th, 1891.]

THE chief interest attached to the record of the new species of fish now under notice is associated with the circumstance that up to the present date but three species of the same genus have been reported, and these from remarkably remote localities. The one species familiar to many members present is the Queensland *Osteoglossum Leichardti*, popularly known in the district from whence it was first obtained as the Barrimundi, or Dawson River Salmon. The second species, *Osteoglossum formosum*, inhabits the region of the Malay Archipelago, having been obtained from both Borneo and Sumatra. The third variety, *Osteoglossum bicirrhosum* hails from the more distant locality of British Guiana. Two other fish only physiologically related to *Osteoglossum* and referable to the same family group, are as yet known to exist, these being the giant *Arapaima gigas* of Brazil, which may attain to a length of fifteen feet, and *Heterotis niloticus* of tropical Africa. All of the known species of the family group of the *Osteoglossidae* are highly esteemed for food and the addition of a new form to the Queensland fauna is consequently a matter of congratulation from an economic as well as from a scientific standpoint.

It is now more than two years since my suspicions were raised concerning the probable existence of a second species of *Osteoglossum* or true Barrimundi in Queensland waters. On submitting a copy of my preliminary Report on the Food-fishes of the colony to Mr. Frank Jardine, of Somerset Station in the Albany Pass, Torres Straits, he assured me that a fish very closely resembling the Dawson River *Osteoglossum Leichardti*, of Gunther (diagrammatically illustrated in Plate xv, fig. 56 of that report), was an inhabitant of the Batavia River and its associated lagoons in Cape York Peninsula. In this opinion he was also supported by Mr. Urquhart, the then sub-inspector of police for that district. In the opinion of both these gentlemen, however, there were apparently minor points of difference that favoured the possibility of its being a distinct species. Mr. Jardine's assistance towards obtaining specimens was heartily accorded. His earlier efforts, however, were not attended with complete success; while failing to secure and preserve a perfect specimen, he nevertheless provided me a single scale taken from the fish's lateral line which gave support to the suspicion of its representing a second species. This scale, in fact, was ornamented with four small red spots in place of the single one, or at the most two only of relatively larger size that are characteristic of *Osteoglossum Leichardti*. Quite recently, this last November, I received from Mr. Jardine three perfect specimens, one of moderate size, $20\frac{1}{2}$ inches, and two small about 12 inches, that completely substantiate their claim for recognition as a distinct species. The diagnostic characteristics of the Cape York Peninsula and Dawson River species are placed side by side for convenient comparison at the end of this communication, and the broad distinctions which can be readily apprehended by any ordinary observer may be thus summarised:—The cleft of the mouth in the Cape York species is conspicuously more oblique, while the posterior edge of the maxillary bone extends further back than obtains in the Dawson River form. The number of rays in both the dorsal and anal fins of the Cape York type are considerably in excess of those of *Osteoglossum Leichardti* and there is also the important feature that the last named fin is destitute of the conspicuous spine that precedes the jointed rays of the same fin in the southern fish. The colour marks, which

from a scientific stand-point are of but secondary import, are nevertheless, so conspicuously distinct as to warrant consideration. As previously intimated three or four relatively small spots occupy the place of the single one, or at most two large spots found in *O. Leichardti*. These smaller spots usually form a chain-like band, and moreover below the fishes' lateral line are for the most part represented by narrow and crescent shaped bands, such as are to be found in no position in the southern type. These colour bands or chains of spots are again developed much nearer to the posterior edge of the scales than the single or double spots in *Osteoglossum Leichardti* and in which last named species they are nearly central.

There being no doubt left as to the specific distinctness of the two forms under notice, it is incumbent that a suitable specific title should be associated with the new form that has been obtained from Cape York. In this connection it affords me much pleasure to associate with this interesting fish the name of Mr. Frank Jardine, to whom the scientific world in general and myself in particular are indebted for its discovery.

It remains for me to relate that since securing Mr. Jardine's specimens, I have obtained positive evidence of *Osteoglossum Jardinii* being widely distributed among other rivers that discharge their waters into the Gulf of Carpentaria. The examination of the spirit collection of fishes contained in the Queensland Museum resulted in my finding a specimen from the Gregory River, debouching upon the south-western watershed of the Gulf, that coincides in every detail with the Batavia River type, and I may further mention that during my recent excursion to the Norman River I was apprised by a local fisherman of the existence of a species of *Osteoglossum* in the upper waters of that river which in its characteristic markings agreed with the Batavia River species.

The newly-introduced form, *O. Jardinii*, in fact seems, so far as present evidence will allow of a decision, to be the characteristic species of the Gulf of Carpentaria watershed and the original type, *O. Leichardti*, to be similarly limited in its distribution to the watershed of the eastern coastline of Queensland.

I have much pleasure, in conclusion, in recording my acknowledgements to Mr. De Vis for his co-operation in the detecting the many diagnostic features that distinguish *Osteoglossum Jardinii* and the co-type of which new species has been presented by me to the Museum which he so ably supervises.

COMPARATIVE DIAGNOSES OF *OSTEOGLOSSUM LEICHARDTI*,
Gth., AND *OSTEOGLOSSUM JARDINII*, S-K.

OSTEOGLOSSUM LEICHARDTI, Gth.

D. 15; A 26.

A conspicuous anal spine.
End of pectoral fin reaching to base of ventral fin.
Mouth cleft nearly vertical.
Maxilla not extending beyond posterior edge of orbit.
Diameter of orbit contained $7\frac{1}{2}$ times in total length of head.
Colour markings consisting of one or at most two largish red spots on an individual scale.

OSTEOGLOSSUM JARDINII, S-K.

D. 20; A. 30.

No anal spine.
Pectoral fin terminating some distance in front of base of ventral.
Mouth cleft conspicuously oblique.
Maxilla extending beyond posterior edge of orbit.
Diameter of orbit contained $5\frac{3}{4}$ times in total length of head.
Colour markings represented by a crescent shaped linear band or a chain of three or four red spots on an individual scale.